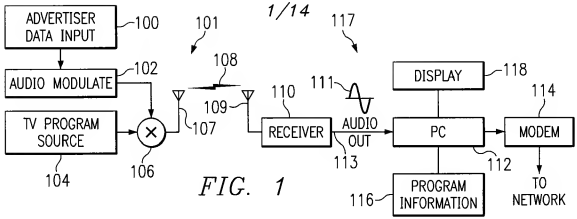


FIG. 1

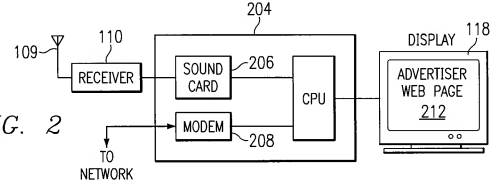


FIG. 2

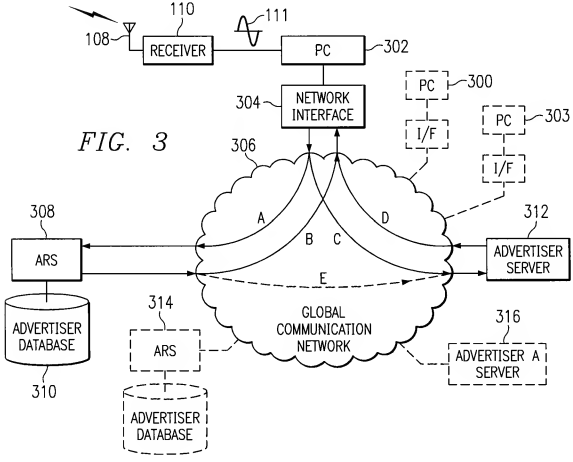


FIG. 3

PATH A: SOURCE TO ARS

400

URL OF ARS	ADVERTISER PRODUCT CODE	URL OF SOURCE

FIG. 4a

PATH B: ARS TO SOURCE

402

URL OF SOURCE	URL OF ADVERTISER	URL OF ARS

FIG. 4b

PATH C: SOURCE TO ADVERTISER

404

URL OF ADVERTISER	REQUEST–FOR–INFORMATION	URL OF SOURCE

FIG. 4c

PATH D: ADVERTISER TO SOURCE

406

URL OF SOURCE	REQUESTED INFORMATION	URL OF ADVERTISER

FIG. 4d

PATH E: ARS TO ADVERTISER (OPTIONAL)

408

URL OF ADVERTISER	REQUEST–FOR–INFORMATION	URL OF SOURCE

FIG. 4e

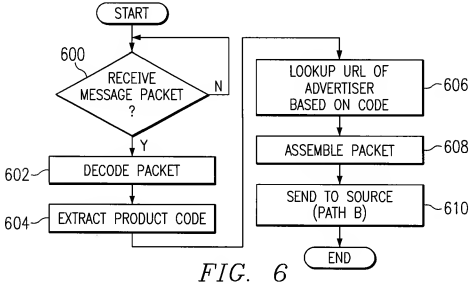


FIG. 6

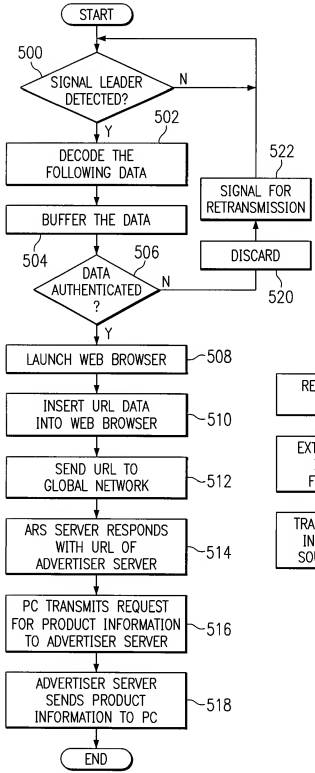

START
500
SIGNAL LEADER DETECTED?
N
Y
502
DECODE THE FOLLOWING DATA
BUFFER THE DATA
504
DATA AUTHENTICATED ?
506
N
Y
522
SIGNAL FOR RETRANSMISSION
DISCARD
520
LAUNCH WEB BROWSER
508
INSERT URL DATA INTO WEB BROWSER
510
SEND URL TO GLOBAL NETWORK
512
ARS SERVER RESPONDS WITH URL OF ADVERTISER SERVER
514
PC TRANSMITS REQUEST FOR PRODUCT INFORMATION TO ADVERTISER SERVER
516
ADVERTISER SERVER SENDS PRODUCT INFORMATION TO PC
518
END

FIG. 5

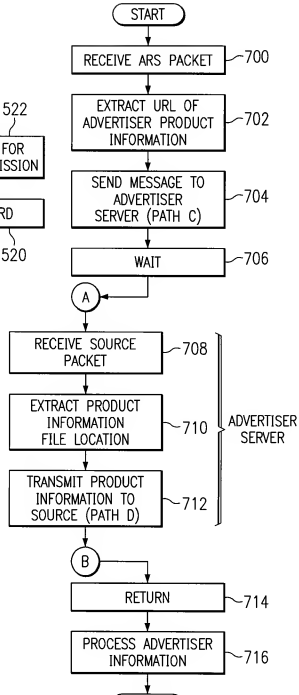
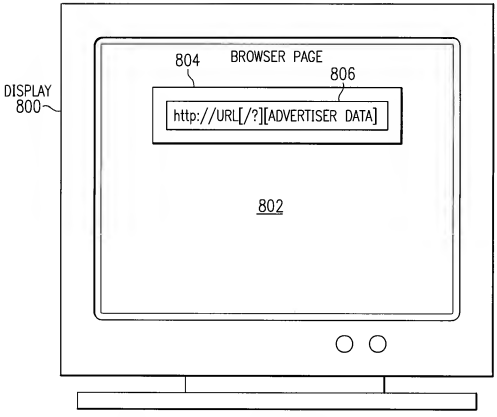

START
RECEIVE ARS PACKET
700
EXTRACT URL OF ADVERTISER PRODUCT INFORMATION
702
SEND MESSAGE TO ADVERTISER SERVER (PATH C)
704
WAIT
706
A
RECEIVE SOURCE PACKET
708
EXTRACT PRODUCT INFORMATION FILE LOCATION
710
TRANSMIT PRODUCT INFORMATION TO SOURCE (PATH D)
712
ADVERTISER SERVER
B
RETURN
714
PROCESS ADVERTISER INFORMATION
716
END

FIG. 7


DISPLAY
800
804
BROWSER PAGE
806
http://URL[/?][ADVERTISER DATA]
802

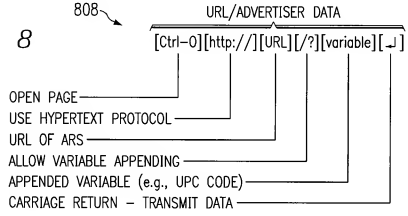

808
URL/ADVERTISER DATA
[Ctrl–O][http://][URL][/?][variable][↵]
OPEN PAGE
USE HYPERTEXT PROTOCOL
URL OF ARS
ALLOW VARIABLE APPENDING
APPENDED VARIABLE (e.g., UPC CODE)
CARRIAGE RETURN – TRANSMIT DATA

FIG. 8

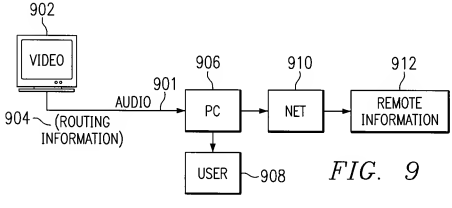

902
VIDEO
906
910
912
901
AUDIO
PC
NET
REMOTE INFORMATION
904
(ROUTING INFORMATION)
USER
908

FIG. 9

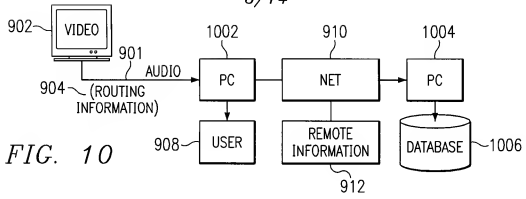


FIG. 10

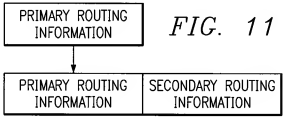


FIG. 11

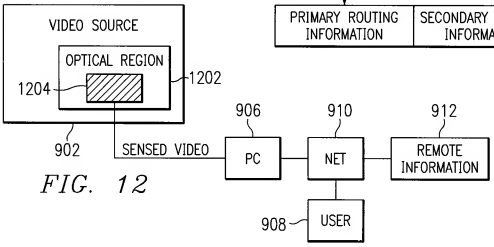


FIG. 12

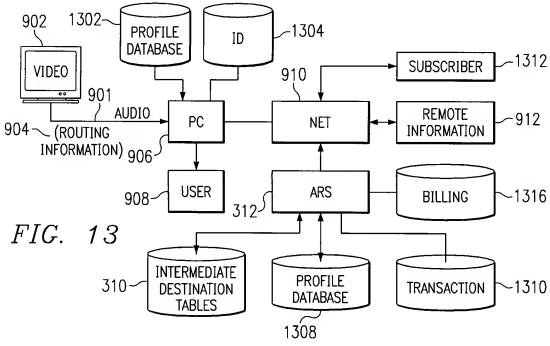


FIG. 13

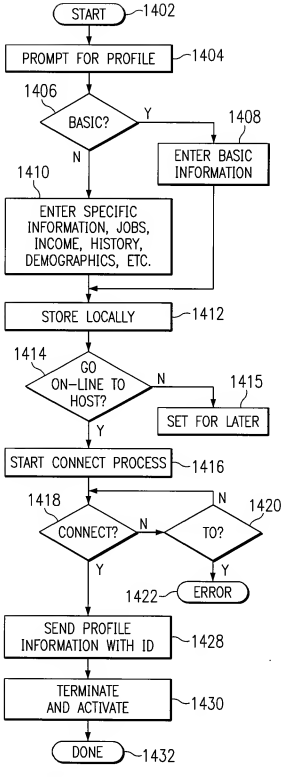

START
1402
PROMPT FOR PROFILE
1404
1406
BASIC?
Y
1408
ENTER BASIC INFORMATION
N
1410
ENTER SPECIFIC INFORMATION, JOBS, INCOME, HISTORY, DEMOGRAPHICS, ETC.
STORE LOCALLY
1412
1414
GO ON-LINE TO HOST?
N
1415
SET FOR LATER
Y
START CONNECT PROCESS
1416
1418
CONNECT?
N
N
TO?
1420
Y
Y
1422
ERROR
SEND PROFILE INFORMATION WITH ID
1428
TERMINATE AND ACTIVATE
1430
DONE
1432

FIG. 14

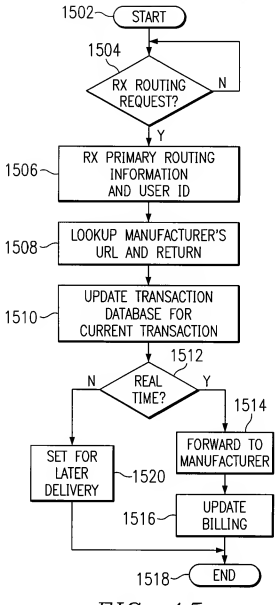

1502
START
1504
RX ROUTING REQUEST?
N
Y
1506
RX PRIMARY ROUTING INFORMATION AND USER ID
1508
LOOKUP MANUFACTURER'S URL AND RETURN
1510
UPDATE TRANSACTION DATABASE FOR CURRENT TRANSACTION
1512
N
REAL TIME?
Y
1514
SET FOR LATER DELIVERY
1520
FORWARD TO MANUFACTURER
1516
UPDATE BILLING
1518
END

FIG. 15

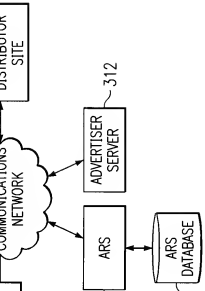


FIG. 16

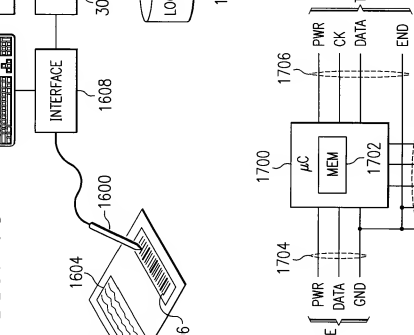


FIG. 17

FIG. 18

FIG. 19

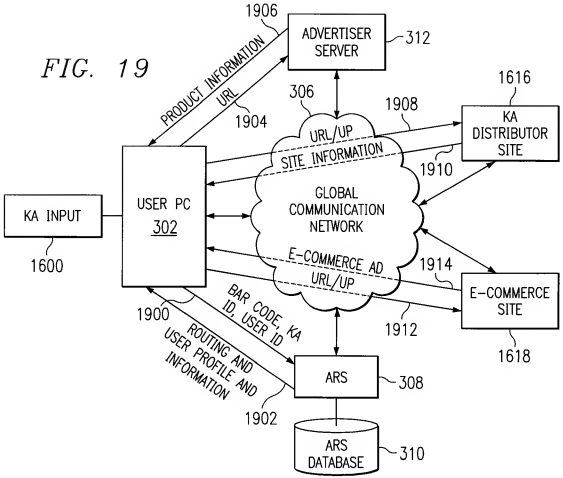

1906
ADVERTISER SERVER
312
PRODUCT INFORMATION
URL
1904
306
1908
1616
KA DISTRIBUTOR SITE
URL/UP
SITE INFORMATION
1910
KA INPUT
1600
USER PC
302
GLOBAL COMMUNICATION NETWORK
E-COMMERCE AD URL/UP
1914
E-COMMERCE SITE
1618
1900
BAR CODE, KA ID, USER ID
1912
ROUTING AND USER PROFILE AND INFORMATION
ARS
308
1902
ARS DATABASE
310

FIG. 20

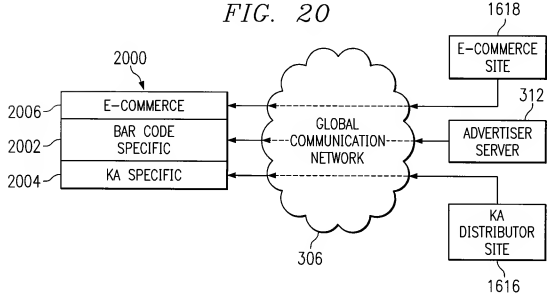

1618
E-COMMERCE SITE
2000
312
2006
E-COMMERCE
2002
BAR CODE SPECIFIC
2004
KA SPECIFIC
GLOBAL COMMUNICATION NETWORK
ADVERTISER SERVER
KA DISTRIBUTOR SITE
306
1616

FIG. 21

ARS DATABASE 2100

2102		2104	2106	2108	
PRODUCT		KA	USER	E–COMMERCE	
BAR CODE	ROUTE	ID	DISTRIBUTOR	PROFILE	BAR CODE	INFORMATION

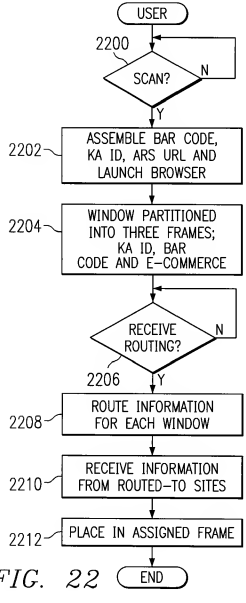


FIG. 22

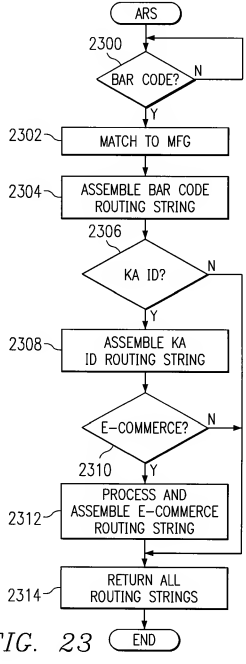


FIG. 23

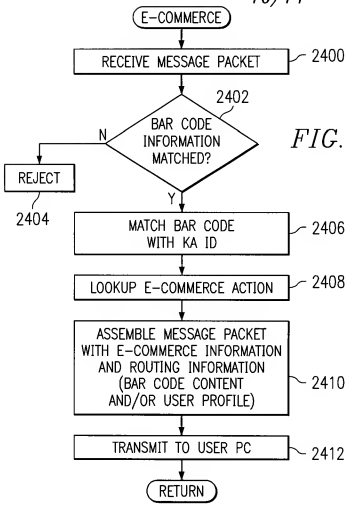

E-COMMERCE
RECEIVE MESSAGE PACKET
2400
2402
BAR CODE INFORMATION MATCHED?
N
Y
REJECT
2404
MATCH BAR CODE WITH KA ID
2406
LOOKUP E-COMMERCE ACTION
2408
ASSEMBLE MESSAGE PACKET WITH E-COMMERCE INFORMATION AND ROUTING INFORMATION (BAR CODE CONTENT AND/OR USER PROFILE)
2410
TRANSMIT TO USER PC
2412
RETURN

FIG. 24

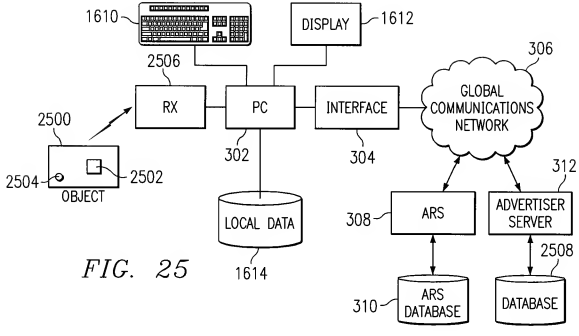

1610
DISPLAY
1612
2506
306
RX
PC
INTERFACE
GLOBAL COMMUNICATIONS NETWORK
2500
302
304
312
2504
2502
OBJECT
LOCAL DATA
308
ARS
ADVERTISER SERVER
2508
1614
310
ARS DATABASE
DATABASE

FIG. 25

FIG. 26

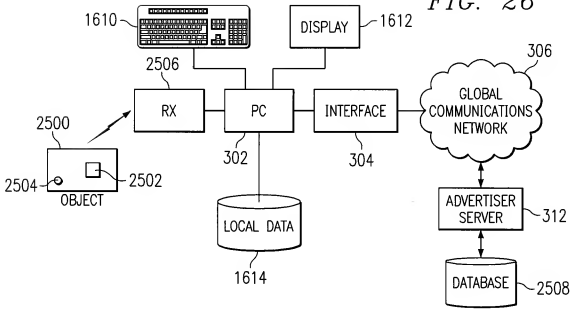


FIG. 27

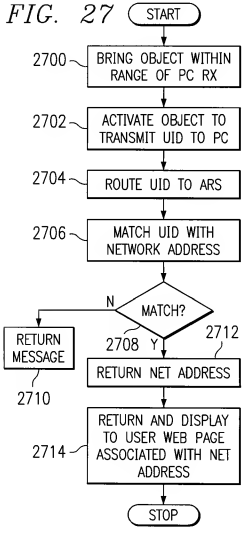
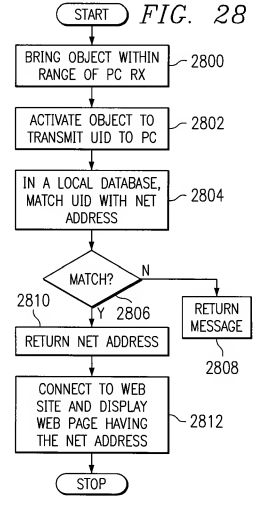


FIG. 28



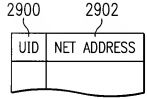


FIG. 29

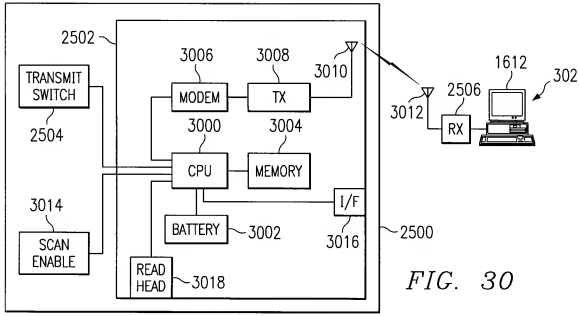


FIG. 30

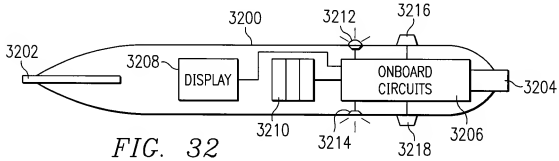


FIG. 32

FIG. 33

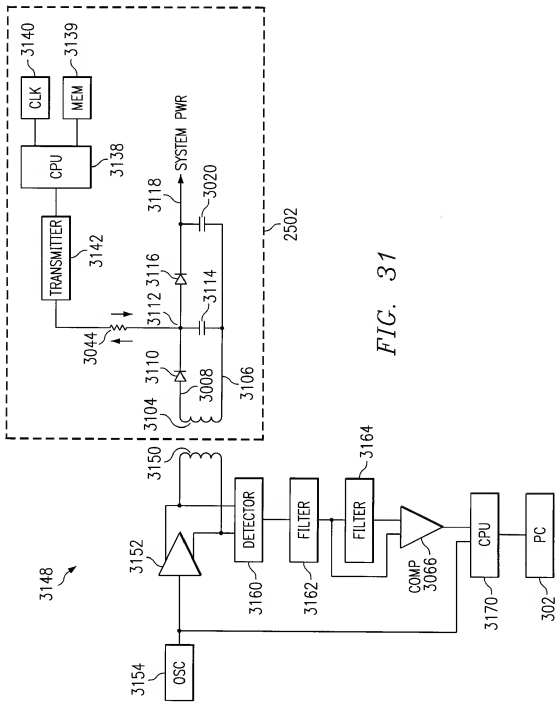

3140
CLK
3139
MEM
CPU
3138
TRANSMITTER
3142
SYSTEM PWR
3118
3020
3116
3112
3114
3044
3110
3008
3106
3104
2502
3150
3148
3152
3154
OSC
DETECTOR
3160
FILTER
3162
FILTER
3164
COMP
3066
CPU
3170
PC
302

FIG. 31

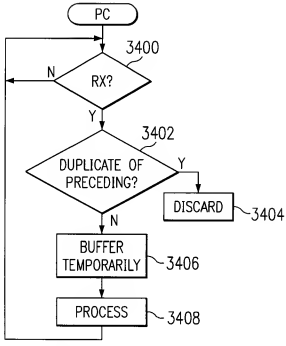

PC
3400
RX?
N
Y
3402
DUPLICATE OF PRECEDING?
Y
DISCARD
3404
N
BUFFER TEMPORARILY
3406
PROCESS
3408

FIG. 34

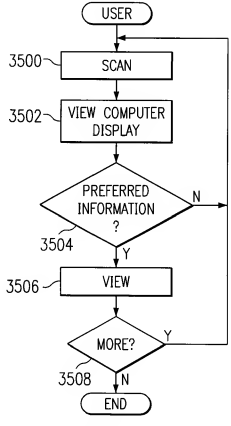

USER
3500
SCAN
3502
VIEW COMPUTER DISPLAY
PREFERRED INFORMATION ?
N
3504
Y
3506
VIEW
MORE?
Y
3508
N
END

FIG. 35